Listing of Claims:

The listing of claims will replace all prior versions and listing of claims in the application:

Claim 1. (Currently amended) A method for inhibiting or reducing the growth of a cell, comprising:
administering a dose of a telomere damage-inducing agent being one or more of ~~antimicrotubules, DNA alkylators, topoisomerase inhibitors or antimetabolites~~ paclitaxel or docetaxel to the cell wherein such agent causes one or more of damaged or shortened telomeres within 24 hours or prior to the initiation of ~~the~~ an apoptosis cascade, or telomere damage followed by a transient increase in telomerase activity; and
administering a dose of a telomerase inhibitory agent being one or more of AZT at less than 260 mg/m^2/day, or d4T at less than 40 mg/m^2/day to the cell, such that an enhanced inhibition or reduction in the growth of the cell is achieved.

Claim 2. (Canceled)

Claim 3. (Previously presented) The method of claim 1 wherein said growth is aberrant.

Claim 4. (Previously presented) The method of claim 1 wherein said cell is a tumor cell.

Claim 5. (Previously presented) The method of claim 1 wherein said cell is a leukemia cell.

Claim 6. (Previously presented) The method of claim 4, wherein said tumor cell is one or more of the brain, breast, ovary, testes, bladder, prostate, colon, lung, liver, pancreas, or uterus.

Claim 7. (Original) The method of claim 4, wherein said tumor cell is benign.

Claim 8. (Original) The method of claim 4, wherein said tumor cell is malignant.

Claim 9. (Previously presented) The method of claim 1 wherein said growth is selected from the group consisting of hyperplastic or hypertrophic.

Claim 10. (Previously presented) The method of claim 1 wherein said inhibition or reduction in the growth of the cell comprises apoptosis.

Claim 11. (Previously presented) The method of claim 1 wherein said telomere damage-inducing agent and telomerase inhibitory agent are administered serially.

Claim 12. (Previously presented) The method of claim 1 wherein said telomere damage-inducing agent and telomerase inhibitory agent are administered concurrently.

Claim 13. (Previously presented) The method of claim 1 wherein said telomere damage-inducing agent and telomerase inhibitory agent are administered in any order.

Claim 14. (Previously presented) The method of claim 1 wherein said telomere damage-inducing agent or telomerase inhibitory agent, is administered as a timed-release formulation.

Claim 15. (Original) The method of claim 14, wherein said telomere damage-inducing agent and telomerase inhibitory agent are both administered as a timed-release formulation.

Claim 16. (Previously presented) The method claim 1 wherein said telomere damage-inducing agent or telomerase inhibitory agent, is administered locally.

Claim 17. (Original) The method of claim 16, wherein said telomere damage-inducing agent and telomerase inhibitory agent are both administered locally.

Claim 18. (Previously presented) The method of claim 1 wherein said telomere damage-inducing agent or telomerase inhibitory agent, is administered systemically.

Claim 19. (Original) The method of claim 18, wherein said telomere damage-inducing agent and telomerase inhibitory agent are both administered systemically.

Claim 20. (Previously presented) The method of claim 1 wherein said telomere damage-inducing agent or telomerase inhibitory agent, is administered regionally.

Claim 21. (Original) The method of claim 20, wherein said telomere damage-inducing agent and telomerase inhibitory agent are both administered systemically.

Claim 22. (Previously presented) The method of claim 1 wherein said cell is in a human.

Claim 23. (Currently amended) The method of claim 1 wherein said telomere damage-inducing agent is paclitaxel~~, or a derivative thereof~~.

Claim 24. (Currently amended) The method of claim 1 wherein said telomerase inhibitory agent is ~~a nucleoside analog, or derivative thereof~~ AZT.

Claim 25. (Canceled)

Claim 26. (Currently amended) The method of claim 24, wherein said telomerase inhibitory agent ~~nucleoside analog~~ is AZT in a dose of no more than about 0.24 mg/kg/day.

Claim27. (Currently amended) The method of claim ~~24~~ 1, wherein said telomerase inhibitory agent ~~nucleoside analog~~ is d4T in a concentration of at least about 20 micromolar in a tissue.

Claim 28. (Currently amended) The method of ~~any one of~~ claim~~s~~ 1 wherein said ~~agent selected from the group consisting of~~ telomere damage-inducing agent ~~and telomerase inhibitory agent,~~ is administered as a subtherapeutic dose, and where a subtherapeutic dose for paclitaxel is less than about 120 mg/m^2, or for docetaxel is less than about 72 mg/m^2.

Claims 29-32 (Canceled).

Claims 33 (Withdrawn) A method of screening a candidate agent effective for inhibiting or reducing the growth of an aberrant cell and for treating a patient with said screened candidate agent comprising:

contacting an aberrant cell with at least one agent and determining if telomere damage has occurred;

contacting an aberrant with the same or at least one other agent and determining if a reduction in telomerase activity has occurred, whereby an agent or agents, alone or in combination, that are determined to induce telomere damage and inhibit telomerase activity, are indicated as an agent or agents that inhibits or reduces the growth of a cell; and

administering to a cell patient a therapeutically effective amount of the identified agent or agents.

Claim34 (Withdrawn). A method of screening an agent for treating aberrant cell growth in a mammal comprising:

contacting an aberrant cell with a telomere damage-inducing agent being one or more of antimicrotubules, DNA alkylators, topoisomerase inhibitors or antimetabolites and determining if telomere damage has occurred;

contacting an aberrant cell with the same or at least one other agent and determining if a reduction in telomerase activity has occurred, whereby an agent or agents, alone or in combination, that are determined to induce telomere damage and inhibit telomerase activity, are indicated as an agent or agents that inhibits or reduces the growth of a cell; and

administering to a mammal a therapeutically effective amount of the identified agent or agents.

Claim 35 (Withdrawn). The method of claim 34 wherein said mammal is a human.

Claims 36-41 (Canceled).

Claim 42. (Currently amended) A method of treating cancer in a patient comprising,

obtaining a telomere damage-inducing agent being one or more of ~~antimicrotubules, DNA alkylators, topoisomerase inhibitors or antimetabolites~~ paclitaxel or docetaxel, ~~to said patient~~ wherein such agent causes one or more of damaged or shortened telomeres within 24 hours or prior to the initiation of the apoptosis cascade, or causes telomere damage followed by a transient increase in telomerase activity, and a telomerase inhibitory agent;

administering an ~~therapeutically effective~~ amount of said telomere damage-inducing agent to said patient~~;~~ and administering an ~~therapeutically effective~~ amount of a telomerase inhibitory agent being one or more of AZT or d4T to said patient, such that an enhanced treatment of the cancer is achieved when compared to the treatment with the telomere damage-inducing agent alone.

Claim 43 (Withdrawn) The method of claim 42, wherein the method further comprises identifying a patient having cancer.

Claim 44 (Currently amended). The method of claim 42, wherein said telomere damage-inducing agent is paclitaxel~~, or a derivative thereof~~.

Claim 45. (Currently amended) The method of claim 42, wherein said telomerase inhibitory agent is ~~a nucleoside analog, or derivative thereof~~ AZT.

Claim 46. (Currently amended) The method of claim 45, wherein said telomerase inhibitory agent ~~nucleoside analog~~ is AZT in a dose of no more than about 0.24 mg/kg/day.

Claim~~47~~. (Currentlyamended) The method of claim 45, wherein said ~~nucleoside analog~~ telomerase inhibitory agent is d4T.

Claims 48-89. (Canceled).

Claim 90 (Currently amended). The method of claim ~~24~~ 42, wherein said ~~nucleoside analog~~ telomerase inhibitory agent is d4T in a dose that produces at least about 20 micromolar ~~plasma~~ concentration in a tissue of a patient ~~subject~~.

Claim 91 (Currently amended). The method of claim ~~26~~ 42, wherein ~~said telomere damage-inducing agent is paclitaxel, or a derivative thereof, and~~ the ~~ratio of the~~ AZT ~~concentration~~ dose is between about 125 mg/day and about 400 mg/day. ~~to the telomere damage-inducing agent concentration is about 40:60 of their respective therapeutic concentrations.~~

Claim 92-96 (Canceled).

Claim 97. (Currently amended) A method for inhibiting or reducing the growth of a cell, comprising:

administering a dose of a telomere damage-inducing agent being one or more of paclitaxel, docetaxel, vincristine, cisplatin, doxorubicin, mitoxantrone, methotrexate, or 5–fluorouracil to the cell wherein such agent causes one or more of damaged or shortened telomeres within 24 hours or prior to the initiation of the apoptosis cascade, or telomere damage followed by a transient increase in telomerase activity; and

administering a dose of telomerase inhibitory agent being one or more of AZT, d4T, carbovir, 7-deaza-dGTP, or 7-deaza-dATP to the cell, such that the doses of the telomere damage-inducing agent and the telomerase inhibitory agent are synergistic for an inhibition or reduction in the growth of the cell ~~is achieved~~.

Claim98 (Previouslypresented) The method of claim 97 wherein the telomere damage-inducing agent is one or more of paclitaxel, docetaxel and vincristine.

Claims99 (Withdrawn) The method of claim 97 wherein the telomere damage-inducing agent is cisplatin.

Claim100 (Withdrawn) The method of claim 97 wherein the telomere damage-inducing agent is one or more of doxorubicin or mitoxantrone.

Claim101 (Withdrawn) The method of claim 97 wherein the telomere damage-inducing agent is one or more of methotrexate, or 5-fluorouracil.

Claim102. (Previouslypresented) The method of claim 97, wherein said growth is aberrant.

Claim 103. (Previously presented) The method of claim 97, wherein said cell is a tumor cell.

Claim104. (Previouslypresented) The method of claim 97, wherein said cell is a leukemia cell.

Claim 105. (Previously presented) The method of claim 103, wherein said tumor cell is one or more of the brain, breast, ovary, testes, bladder, prostate, colon, lung, liver, pancreas, or uterus.

Claim 106. (Previously presented) The method of claim 103, wherein said tumor cell is benign.

Claim 107. (Previously presented) The method of claim 103, wherein said tumor cell is malignant.

Claim 108. (Previously presented) The method of claim 97, wherein said growth is one or more of hyperplastic or hypertrophic.

Claim109. (Previously presented) The method of claim 97, wherein said inhibition or reduction in the growth of the cell comprises apoptosis.

Claim110. (Previouslypresented) The method of claim 97, wherein said telomere damage-inducing agent and telomerase inhibitory agent are administered serially.

Claim111. (Previouslypresented) The method of claim 97, wherein said telomere damage-inducing agent and telomerase inhibitory agent are administered concurrently.

Claim112. (Previouslypresented) The method of claim 97, wherein said telomere damage-inducing agent and telomerase inhibitory agent are administered in any order.

Claim 113. (Previously presented) The method of claim 97, wherein said telomere damage-inducing agent or telomerase inhibitory agent, is administered as a timed-release formulation.

Claim 114. (Previously presented) The method of claim 113, wherein said telomere damage-inducing agent and telomerase inhibitory agent are both administered as a timed-release formulation.

Claim 115. (Previously presented) The method of claim 97, wherein said telomere damage-inducing agent or telomerase inhibitory agent, is administered locally.

Claim 116. (Previously presented) The method of claim 115, wherein said telomere damage-inducing agent and telomerase inhibitory agent are both administered locally.

Claim 117. (Previously presented) The method of claim 97, wherein said telomere damage-inducing agent or telomerase inhibitory agent, is administered systemically.

Claim 118. (Previously presented) The method of claim 117, wherein said telomere damage-inducing agent and telomerase inhibitory agent are both administered systemically.

Claim 119. (Previously presented) The method of claim 97, wherein said telomere damage-inducing agent or telomerase inhibitory agent, is administered regionally.

Claim 120. (Previously presented) The method of claim 119, wherein said telomere damage-inducing agent and telomerase inhibitory agent are both administered systemically.

Claim 121. (Previously presented) The method of claim 97, wherein said cell is in a human.

~~C~~laim 122. (Currently amended) The method of claim 97, wherein said telomere damage-inducing agent is paclitaxel~~, or a derivative thereof~~.

Claim 123. (Currently amended) The method of claim 97, wherein said telomerase inhibitory agent is ~~a~~ AZT ~~or a derivative thereof~~.

Claim124. (Currentlyamended) The method of claim 123, wherein said ~~nucleoside analog~~ telomerase inhibitory agent is AZT in a dose of no more than about 0.24 mg/kg/day.

Claim125. (Currentlyamended) The method of claim 123, wherein said ~~nucleoside analog~~ telomerase inhibitory agent is d4T in a tissue concentration of at least about 20 micromolar.

Claim 126. (Currently amended) The method of claim 97 wherein said agent ~~is one or more of~~ telomere damage-inducing agent ~~and telomerase inhibitory agent,~~ is administered as a subtherapeutic dose, and where a subtherapeutic dose for paclitaxel is less than about 120 mg/m^2, or for docetaxel is less than about 72 mg/m^2.

Claim 127 (New) The method of claim 1 wherein said cell is in a non-human animal.

Claim 128 (New) The method of claim 97 wherein said cell is in a non-human animal.

Respectfully submitted,

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Jerry K. Mueller, Jr.
Reg. No. 27,576
MUELLER AND SMITH, L.P.A.
MUELLER-SMITH BUILDING
7700 Rivers Edge Drive
Columbus, Ohio 43235-1355
Tel.: 614-436-0600
Fax: 614-436-0057
email: smueller@muellersmith.com

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